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# **Business Strategy: thinking, discourse and action through a Cybernetics lens**

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The notion of a business ‘strategy’ is a nebulous term which invites a variety of interpretations, with some focusing upon the content of strategies and others upon the process of strategising. Whatever the interpretation, it is apparent that strategising is problematic and reflects the poor understanding of the dynamic between the two, which in turn reflects a poor understanding of the strategising process. In response, this paper presents Stafford Beer’s Viable System Model as a device with which to think about the strategising process as an embedded feature of organisational activity. With the insights provided with its use, it is proposed that the VSM offers a valuable business tool to help improve the way strategy is carried out within businesses.

**Keywords:** Strategy process, Strategy as practice, cybernetics, Viable System Model, systems, management.

## **Introduction**

That Mintzberg et al (1998) start their book “Strategy Safari” with John Saxe’s fable “The Blind Men and the Elephant” highlights the multifaceted nature of the nebulous concept embraced within the word ‘strategy’ within the business context. What can be established is that, as a concept, it pertains to something that is done within organisations and is concerned with the long-term relationships between the organisation and what goes on outside the organisation. It relates to the content of thoughts and discussions of this within the organisation and invokes a process through which this thinking and discourse takes place. It tends to be an integral feature of organisations, but is distinct from the day-to-day routines of the organisation (Chandler, 1962).

To be more definitive about strategy is problematic and reflects the on-going debates over the last five decades about strategy as a concept and as practice. The evolution of views about strategy is well documented (Mintzberg et al, 1998; Hoskisson et al, 1999; Phelan et al, 2002; Ramos-Rodriguez & Ruiz-Navarro, 2004; Herrmann, 2005; Furrer et al, 2008; Cummings & Daellenbach, 2009). Hoskisson et al (1999) describe this evolution, from which three phases can be distinguished<sup>1</sup>. The 1960s (phase I) were characterised by views of the firm as unique, with studies that focused upon best practices using case-studies and with a prescriptive orientation. The firm was viewed in the late 1970s and 1980s (phase II) as an entity positioning itself within an economic arena (e.g. an industry, strategic group, competition), with studies grounded in industrial economics and taking the form of statistical analysis of large data-sets, explanatory and predictive in orientation and exemplified by the work of Michael Porter. Bourgeois (1984) critiques these early studies as being ‘deterministic’ (i.e. there is a best course of action for given conditions) and ‘reductionist’ (i.e. correlation studies based upon a single independent variable). During the 1980s (phase III) attention focused back upon the firm with the recognition that some firms perform better than others, which was attributed to their use of

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<sup>1</sup> These phases are ascribed by the author for the purpose of cross-referencing and not by Hoskisson et al (1999)

## **Business Strategy: thinking, discourse and action through a Cybernetics lens**

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resources. Characterised by case-studies, studies attempted to establish the relationship between resources and sustainable competitive advantage, with different themes emerging (e.g. strategic leadership and knowledge management). Hoskisson et al's (1999) review indicates the increasing importance of research into the sustainability of competitive advantage and the dynamic nature of resources against the backdrop of globalisation, rapid developments in (information) technologies and the growing importance of other institutional contexts from emerging geographical locations.

One important aspect of strategising is decision making (Chandler, 1962; Ansoff, 1965), with perhaps the inference that decisions are made by top managers and are rationally grounded or 'rationally bounded' (Simon, 1978). However, relatively recently, in recognition that strategising is still problematic, views about the rationality underpinning strategising (e.g. formalised planning using a range of analytical techniques) have been challenged by those who view strategising as a more complex process. Child (1972) presented the view that decisions involved choice, made "in the light of [the] ideological values" (ibid: 16) of those in a position to make decisions. Furthermore, this decision-making is not confined to top management, with strategic decisions being made by others; strategising is "an organization-wide activity" (van Cauwenbergh & Cool, 1982: 261). Moreover, Mintzberg (1978) recognised that planned strategies were not necessarily realised and that strategies could unintentionally emerge through a succession of 'one-by-one' decisions. Indeed, he called for:

a sophisticated understanding of the rich reality of strategy formation, and that will require an open mind, a recognition of how little we really know, and intensive, painstaking research (ibid, 948).

Since then, the notion that strategy is a socially constructed process has taken a hold, breaking with positivistic notions about the strategising process. This underpins Chaffee's (1985) social contract perspective of strategy whereby individuals freely enter into cooperative agreements; "reality is socially constructed... is defined through a process of social interchange" (ibid: 93). In 1991, Knights & Morgan argued for strategy to be viewed "as a set of discourses and practices" (Knights & Morgan, 1991: 252). More recently, the social nature of strategising has been conceptually developed by those adhering to the 'strategy-as-practice' view (Whittington, 1996; Jarzabkowski, 2005), which grounds itself in the detailed study of practises. An interesting feature of this particular way of thinking is the attention given to the significance of both routine activities and institutional factors in the shaping of strategic thinking within the organisation. This offers the challenge of how to conceptually model organisational practices, including the process of strategising

This paper will attempt to address this. An underlying assumption is that strategising happens within organisations and occurs at different hierarchical levels within the organisation. Underpinning the conceptualisation of strategising is the view that discourse about strategies will only occur if there is interaction between those wishing to engage in discourse, otherwise it will not happen no matter how desirable. Such an obvious statement has important ramifications. An organisation comprises of interactions between its members and the organisational structure is recognised in terms of invariances in these interactions (i.e. they are recurrent). If certain interactions do not occur then there can be no discourse, even electronically when the email sent is not read. It is through these interactions that discourse occurs about the issues relating to this strategy. Indeed, the content of discussions is shaped as much by those who are excluded from these discussions as by

## **Business Strategy: thinking, discourse and action through a Cybernetics lens**

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those who are included, because of the absence of the potential contribution of the excluded. Furthermore these discussions need not be confined to within the organisation but may include others (e.g. consultants, customers, NGOs). Moreover, there are likely to be other shaping influences perhaps from national government bodies (e.g. legislation and policies), society (e.g. changing consumer attitudes and behaviours) and cultural (e.g. growing presence of different ethnic groups). The outcome of these discussions may be a document detailing a course of action or a shared vision about where the organisation is going. Alternatively, it may be an edict, whereby those implementing the 'strategy' are given targets or objectives and told to make them happen. Whatever the process, an understanding of this process requires attention to not only the activities (e.g. data collection, analysis, planning) but also the various stakeholders and their relationships, whether fleeting or long-term, and thereby the discourse that ensues (or is absent), from which strategies arise. It draws attention to the manner in which strategy as a process is embedded in the organisation, which re-opens the debate about the relationship between strategy and structure initiated by Chandler in 1962. Moreover, it suggests that strategy is context specific, presenting the challenge of how to create a generic conceptualisation of this process or alternatively raising the question of whether this is desirable.

The aim of this paper is to examine the strategy process, but from a perspective that draws upon the insights provided from the domain of Management Cybernetics, specifically the Viable System Model (VSM) developed by Stafford Beer, with its methodological implications examined by Raul Espejo. The account of the VSM presented here is heavily influenced by the work of Espejo. That the strategy-as-practice movement advocates the need to understand the interplay between the day-to-day and the long-term, at the same time taking into consideration institutional factors, resonates with the conceptualisation of organisations as viable systems both embedded within and embedding viable systems. Indeed, Espejo et al (1999) clearly articulates this

since the VSM is structurally recursive, it is expected that people throughout the organisation, and not just top managers, will be responsible for developing policies, and related enabling structures, within their areas of concern in the organisation (Espejo et al, 1999: 663).

The significance of this is that it provides the bridge between the different 'layers' of 'organisation' (e.g. government policy, regional government, corporate headquarters, business unit, operational entity, workstation).

The contribution of this paper is to present a way of thinking about the process of strategy as an embedded feature of organisational activity with context specificity. It suggests that the VSM can aid organisations to be reflective about what they are doing, to understand themselves and to create conditions more conducive for the strategising process.

The paper is presented in five sections. The first introduces and describes the Viable System Model (VSM) as a conceptual tool for the modelling the context of strategising. The second section outlines a variety of issues relating to the implementation of the VSM. The next section examines the strategising process using the VSM to provide insight. This is followed by a cursory insight into how the VSM can assist in understanding issues relating to the implementation of three distinct strategies. The final section provides a brief discussion and conclusions about the implications of this study.

## **Modelling the context of strategy: the organisation**

A simplistic way of conceptualising the business is as an entity which exists in relationships with other entities within a shared space which is conventionally referred to as the business environment. There is an inside to this entity and an outside. Phase I strategists focused upon optimal responses to particular conditions outside. Phase II strategists were concerned about where to position the entity relative to all other entities within this shared space – the focus being upon the outside. Entities were assumed to be identical. However, it has been recognised (phase III) that two or more entities may be competing for the same position which focuses attention upon the ability of one entity to outperform the others – with focus being upon inside. Entities differ from each other. Moreover, there is a temporal dimension in that what is going on both outside and inside is constantly changing with the rate of change varying considerably. Entities evolve / adapt relative to outside. Moreover, entities can merge or split, creating new entities. An observer may describe this whole view of strategy, its conceptualisation and practice as complex, with many different entities, relationships and issues being distinguished.

### Introduction

One conceptual response to how this complexity can be handled has been the development of the Viable System Model (VSM) (Beer, 1966, 1972, 1975, 1979, 1981, 1983, 1984, 1985; Espejo, 1988; Espejo and Harnden 1989). Beer defines a ‘viable system’ as

any organism or organisation that is capable of maintaining its identity independently of other such organisms within a shared environment (Beer 1985: 14).

In other words, the VSM can be viewed as a conceptual explanation of how a social system functions. Moreover, as a conceptual explanation, it offers more; it ‘‘generates considerable power to describe and predict, diagnose and prescribe’’ (Beer, 1984: 24), this power resulting because the ‘‘VSM sets out to give a necessary and sufficient account of the laws of any viable system’’ (Beer 1989: 340). However, Beer then warns that ‘‘if the VSM language is used loosely and merely descriptively, then of course the power is lost’’ (ibid).

Epistemologically, this may immediately draw the suspicions of the social constructivists, but this is need not be the case. The VSM is nothing more than a model; a device to influence both our thinking and our discussions about actions. The VSM offers a model of an organisation’s structure and functionality. However, the view of structure here is not as given set of fixed relations between entities, but as observed invariances (or interactions, routines) within organisations, enduring and adaptive over time. These observed invariances can be referred to as mechanisms. Irrespective of where we position ourselves relative to an organisation (e.g. employee, shareholder, analyst), we are all observers. Moreover, and underpinning the notion of structure, is the view that if there is no interaction between specific entities, then no discourse can ensue between these entities. The organisation can be viewed as having structural integrity if the requisite discourses ensue to maintain the stability of the organisation.

## **Business Strategy: thinking, discourse and action through a Cybernetics lens**

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The underlying assumption is that the VSM ‘works’ as a conceptual explanation for observations of organisational behaviour and can be viewed in the same sense perhaps as Newton’s Laws, which work in their explanatory power, but are not definitive. Thus, the VSM offers a tool to systematically conduct a systemic analysis of any social system in a manner that allows discussion about these routines, functions and their relations in such a way that allows questioning of their efficacy, exploration of their dysfunctionality, and discussion about possibilities for improvement in terms of structural adjustments. In this sense, the VSM can be viewed as diagnostic and prescriptive, particularly of social organisations of a ‘formal’ manner, e.g. legal organisational entities.

### Background - history

The source of the VSM is the domain of Cybernetics, which emerged during the 1940s from the pioneering thinking of Norbert Weiner and his colleagues. The VSM was developed by Stafford Beer over a thirty year period and has been extensively applied within various contexts of organisation, including that of bees (Foss, 1989), but more significantly at a national level in Allende’s Chile in the early 1970s. In 1971, Beer was invited “to design a regulatory system for the social economy of the country” (Beer 1994: 10). The military coup on the 11th September 1973 brought this endeavour to an abrupt end. This experience is recounted by Beer (Beer, 1975, 1981, 1989) and also by a leading project member, Raul (Espejo, 1990). It has also attracted academic discussion (e.g. Ulrich 1981; Jackson 1988). More recently, the VSM has been used in an analytical mode to examine the structure of the tourism industry in Scotland (Harwood, 2009).

### Description

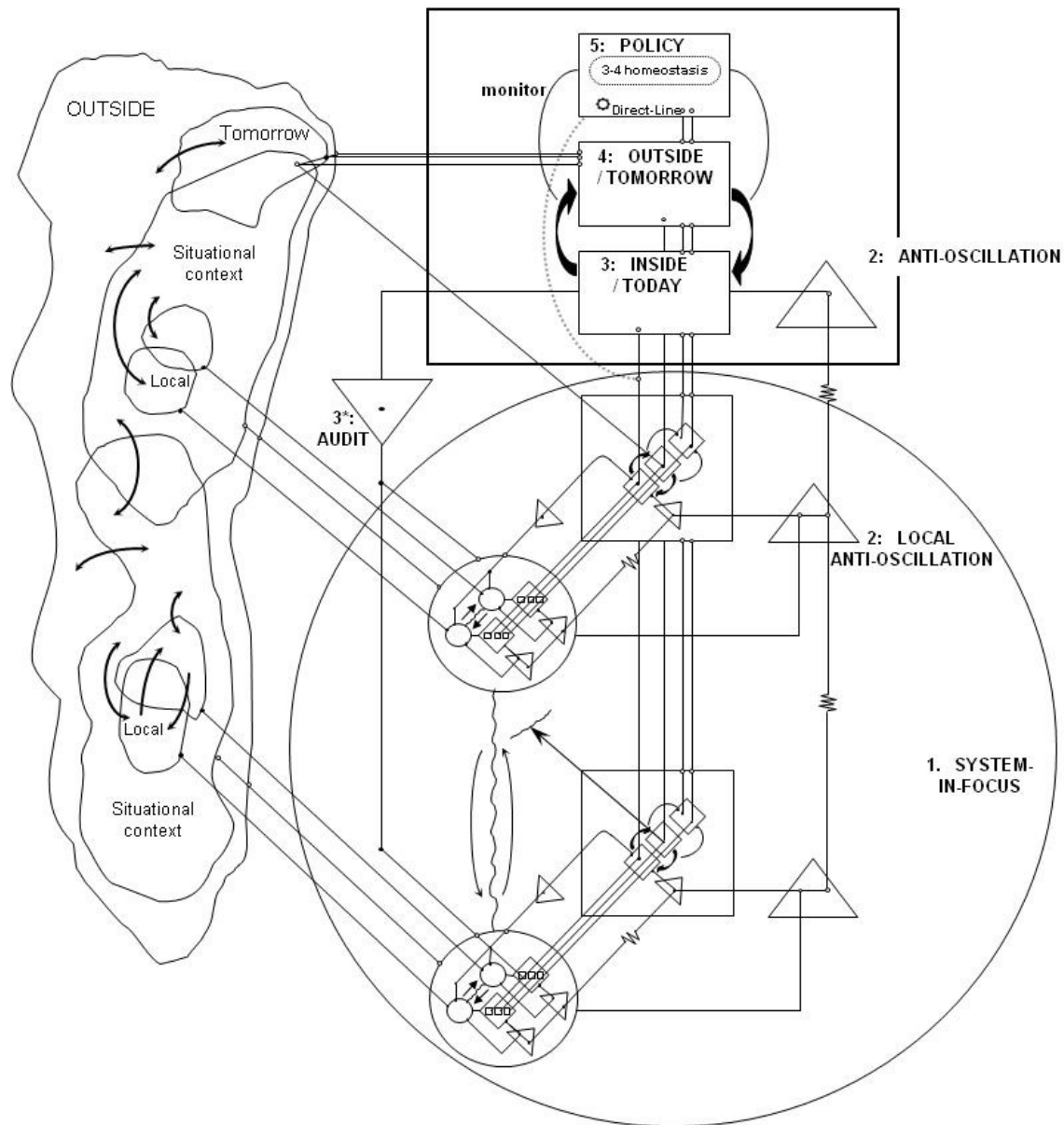
The textual description of the VSM in Beer’s publication is complemented by a diagrammatic presentation (Figure 1). However, the apparent complexity of Figure 1 disguises an inherent yet deceitful simplicity. The inherent simplicity manifests in the ‘logic’ of the relations between the different elements. That it is deceitful manifests in the application as will be explored later.

A viable system is one that has discretion about what it is does; it has autonomy and, through this autonomy can establish what it is in terms of purpose and identity. Beer identifies five ‘systems’ within any viable system. The purpose of any viable system is defined by its core or primary transformation (system one, i.e. the system-in-focus). However, a primary transformation, if it is to minimise the production of unacceptable outcomes needs some form of regulation (systems two-five). System two provides a co-ordinatory mechanism which facilitates autonomy within the different subsystems, whilst reduces the potential for the different subsystems of system one to function in an unsynchronised or oscillatory manner. Control of the transformation is enacted through systems three and three\* with concern for what is going on operationally and now. Rather than facilitate autonomy in the subsystems of system one through the functioning of system two, system three is the voice of edict and negotiation. It is concerned with agreements about what is to be attained (targets), what resources are to be allocated, rewards and sanctions. It establishes responsibility and accountability. It also continuously

## Business Strategy: thinking, discourse and action through a Cybernetics lens

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measures the acceptability of outcomes (performance). System three is supported by a sporadic monitoring (audit) mechanism (system three\*) which ascertains system one compliance.



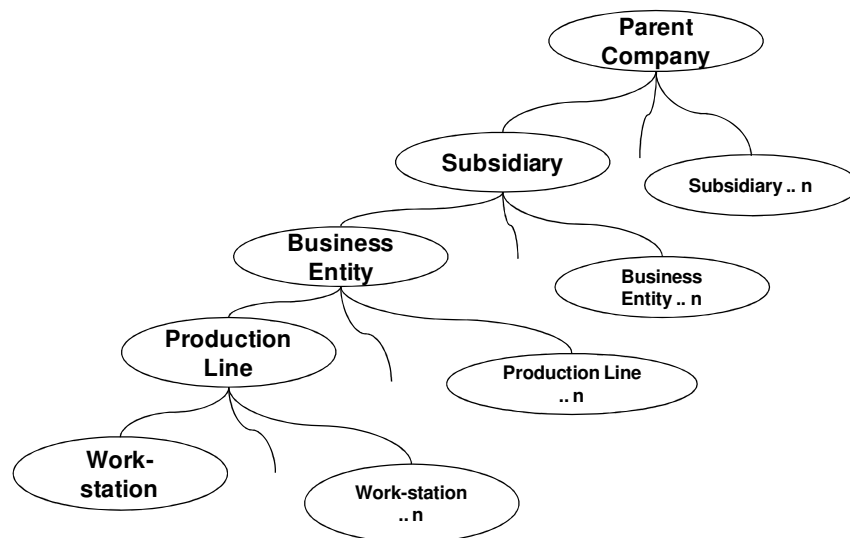
**Figure 1** A diagrammatic presentation of the VSM (adapted from Beer, 1985:139)

System four is a mechanism which is concerned with what is going on outside the system-in-focus and the future. It is both forward looking and reflective, generating a self-awareness of capability and how it is going to move forward. It functions with system three as an adaptation mechanism, which aligns what is going on in system one with what is going on outside, both now and into the future. Closure is given to this configuration by the panoptic system five, which provides direction. The adaptive nature of the VSM to changing requirements and developments is one that allows other entities to be merged with or be absorbed within a given viable system and also incorporates a generative mechanism in that new entities can emerge from any viable system.

### Unfolding complexity

This rather simple overview of a viable system becomes more complex when one considers that each viable system is both embedded and has embedded within, other viable systems (Figure 1). This notion of the embeddedness or recursiveness of viable or autonomous systems provides an analytical means by which meta-systems can be coupled to sub-systems. Whilst the VSM allows the regulatory nature of the system-in-focus to be examined, the unfolding of complexity allows the distribution of discretion (i.e. the autonomy to make decision) to be examined (Espejo et al, 1999).

This is illustrated in Figure 2 with the example of a parent company. Unfolded it reveals five levels of recursion with autonomous entities identified at each level. The parent unpacks to reveal subsidiaries, business entities, production lines and workstations. At the lowest level is the work-station, which is where the transformational activities of the parent company are performed. It could be argued that workstations are not autonomous entities in that they are part of the production line. However, in this specific example, it is assumed that the workstation has discretion about the handling of the day-to-day activity performed there, in particular, the dealing with disturbances (e.g. quality issues) to its smooth functioning and the introduction of improvements (i.e. process innovations) to the manner in which the transformation is performed.



**Figure 2** Unfolding the complexity of the ‘parent company’

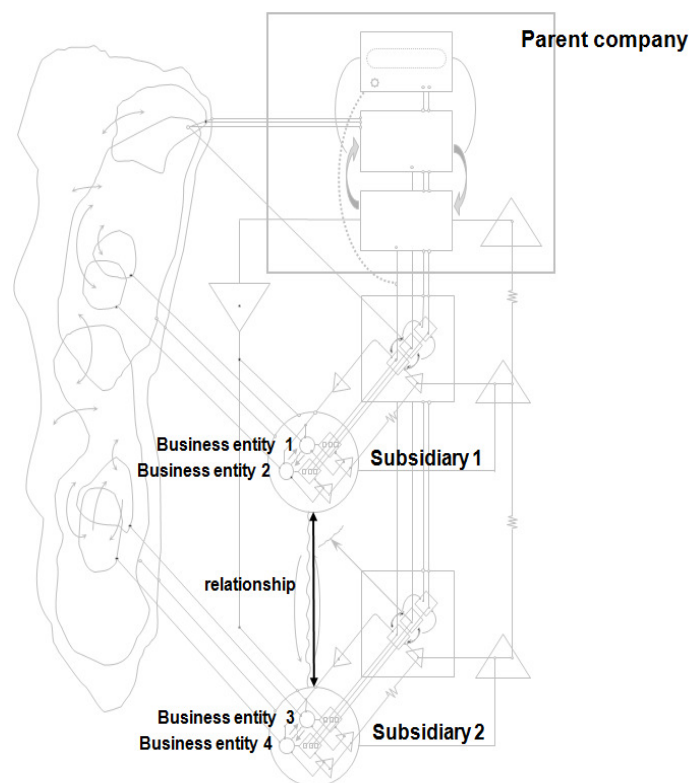
It draws attention to the distinction between recursion and the more familiar notion of hierarchy, with which organisations tend to be associated. Espejo provides clarity about this:

it is apparent that each primary activity should have its own purposes and identity. If this is not the case, we are seeing a hierarchical and not a recursive organisation. How can you be autonomous if you do not create your own purposes or are not responsible for your own identity? (Espejo, 1999: 647)



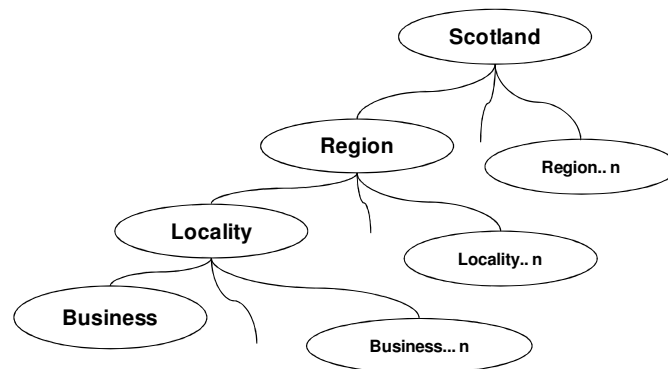
Hierarchy invokes the top down transmission of edict, with each lower level accountable for results without the discretion about how to achieve these results. In contrast, a recursive organisation emerges from the interactions of primary activities, at different structural levels, each aligning their self-defined purposes with those of the more global organisation. In a recursive organisation there is no unilateral imposition of corporate purpose by edict; it is inherently pluralistic.

The unfolding of the complexity of a viable system as presented in Figure 2, translates across to the VSM representation presented in Figure 1 in the manner presented in Figure 3. Within both representations of the VSM there are three levels of recursion: in other words there are two viable systems (business entities) embedded with each of the two viable systems (subsidiaries) embedded within the one viable system which is denoted as the parent company. Whilst the representation of the VSM may depict the importance of the relationships between levels the relations between entities at given levels should not be overlooked, since, if properly managed, can give rise to synergies through the exchange of complementary capabilities.



**Figure 3 Mapping organisational levels to different levels of recursion of the VSM**

One feature of this notion of recursion is that, whereas the preceding example unfolds the complexity of a parent company, this principle of recursion has application to the unfolding of the complexity of any autonomous entity, such as the nation state. Beer (1981) identified eleven levels of recursion in his application of the VSM within Chile in the 1970s.



**Figure 4** unfolding the complexity of the Scottish tourism industry (from Harwood, 2009)

Figure 4 presents the unfolding of complexity for the case-study of the Scottish tourism industry, documented in Harwood (2009). Structurally, tourism is organised with a Minister for Tourism leading it, but supported by the Scottish Government and the public agency VisitScotland. In principle, this national body engages with businesses on a regional basis through the Area Tourism Partnership (ATP), each of which has discretion about how it wishes to develop tourism in its respective area, but in alignment with the national tourism strategy (Scottish Executive, 2006). In practice, the ATP has been unable to engage with businesses, so can be inferred to be a dysfunctional feature of the tourism structure. Moreover, businesses at a local level have organised themselves into collectives, often with a legally recognised identity (i.e. registered companies), with aims to do with the promotion and / or development of their locality. Moreover, their proliferation, autonomy and lack of the alignment with the national policymakers and the national strategy, provides another insight into the dysfunctionality of the industry.

### **The practicalities of the application of the VSM**

This very simplistic account of the VSM is deceitful in that it disguises a variety of issues.

First is the argument that the description provided infers that the VSM is a model of a mechanistic system and that social systems are not mechanistic. However, it has already been stated that an observer of a social system will identify invariances in the behaviour of any social systems. Rules, procedures and routines (bureaucracy) are a normal feature of many organisations. Furthermore, the description of the VSM upholds the notion of agency, but not as conveyed in Actor-Network- Theory (Callon 1986), but in the sense that choice underpins the willingness for action, irrespective of whether viewed as rational or irrational. The resource bargaining mechanism offers a demonstration of how choice manifests through the negotiation about deliverables, the option to withhold from full participation and if all fails then the decision to leave. Likewise, edicts can be followed or ... ignored.

## **Business Strategy: thinking, discourse and action through a Cybernetics lens**

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Second is the view that the model is easily applied. Espejo et al (1999) and Espejo (2008) offer methodological insight into how the VSM can be used. One of the difficulties of use is the translation of observed organisational practices into the format of the model. There is a need to be able to recognise the different entities and the complex relations that are to be found in organisation, not only direct interactions, but also those arising with the emergence of newer forms of ICTs. Whilst the routine may not be revealing of anything toward, an effective analysis will reveal the possible symptoms of dysfunction, such as customers having to deal with many departments when administering acquired financial products rather than one account manager. Internal quality issues are a more explicit symptom.

Third is the rigour in which it is applied. Whilst Beer warns against loose use and mere descriptive use (Beer 1989: 340) it is open to question about how meticulous to the technical detail one has to be to be able to make effective use of the VSM. It can be argued that loose use may lead to superficial analysis and discussion may ignore essential issues and result in inappropriate proposals for action.

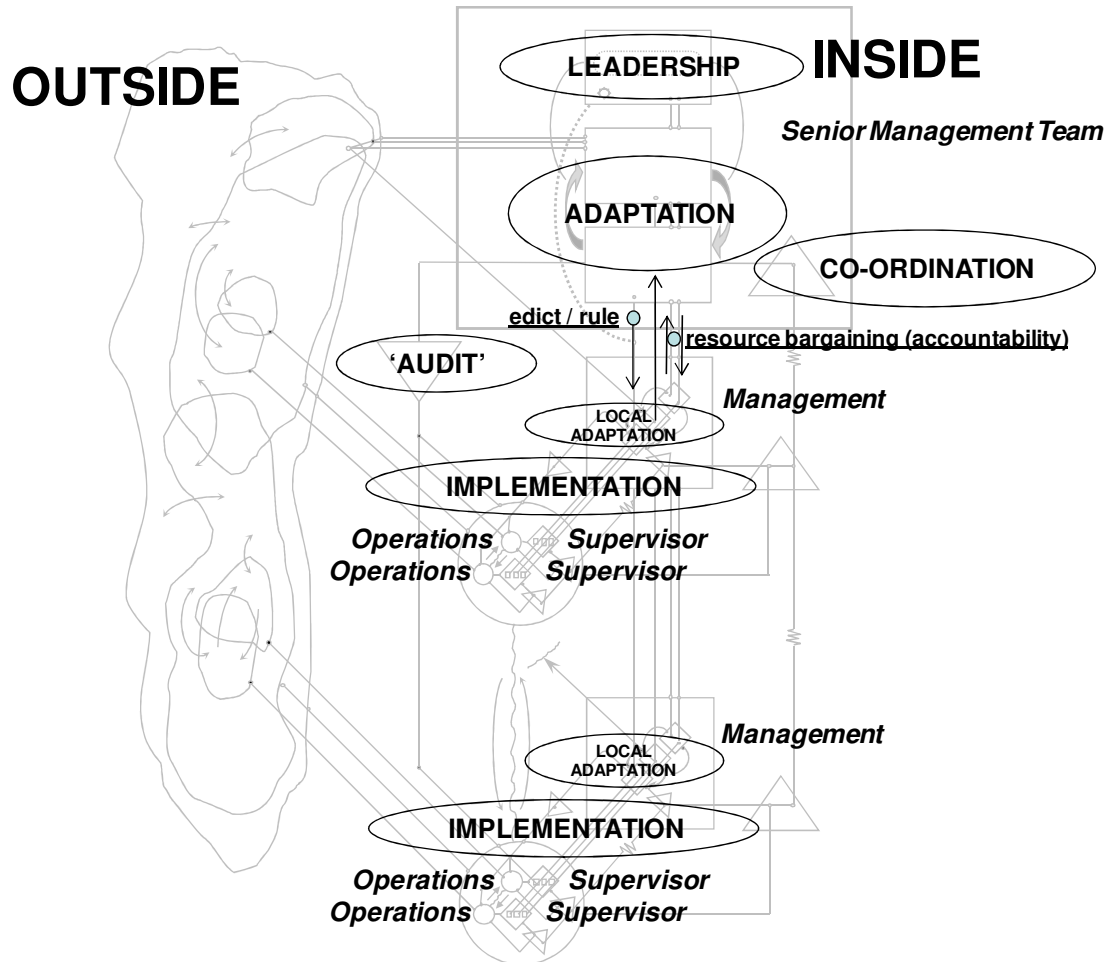
This leads to the fourth issue, which is the temptation to conflate the model with reality. Whilst the model can stimulate and guide discussions about both what takes place and possibilities, the murkiness of reality is distinct from the ideal of the model. This is most poignantly illustrated with the application of the VSM to the development of a regulatory system for the Chilean economy under President Allende's governance. Rather than the application of the VSM being responsible for the events that concluded on the 9<sup>th</sup> September 1973, it exposes the 'political' motives of those opposing a democratically elected government, rather than the consequences of implementing the VSM. The context of application of the VSM, as with any model, need not be consensual and may comprise many different dissident groups. Indeed this highlights methodological issues about using the VSM and the handling of the stakeholders and dissident groups. It does not require the VSM to determine that it is desirable that there is a mechanism to bring all parties to a round-table, but the issue is how to persuade attendance. As with any model, the VSM does not guide how discussions are conducted nor how differences of opinions are handled. Moreover, it cannot prevent use in an exploitive mode.

Finally, is the manner in which the VSM is applied. Whilst some would argue that the VSM is mechanistic and upholds autocracy through its mechanisms of control (system three). Counter to this is an alternative focus upon the importance of the individual and local autonomy within an overall cohesive context. The VSM can support conceptually both forms, but does not determine which manner of use is adopted. It cannot prevent use in an exploitive mode where the emphasis is upon control by edict, with the elimination of autonomy and mechanisms for co-ordination.

### **The VSM as a model of the process of strategising**

The VSM is a device which offers an insight into the process of strategising as understood by followers of the strategy-as-practice view. It provides a conceptual framework to explain the relationship between the routine of implementation and the vision and direction of leadership, as illustrated in the schema of Figure 5. This highlights the essential features of the VSM. There is an inside to the business and an outside, this being the

environment with which the business interacts. System five of the company is denoted by the word ‘leadership’. The adaptation mechanism is provided by the system three-four dynamic. System three\* is the random audit mechanism, whilst system two provides co-ordination of all activities within system one. This simple representation of the VSM is found at each level of recursion. Implementation is the attainment of the aims of the business through the activities of operations. The following section briefly examines the business-environment relationship, leadership and adaptation as well as the notion of organisational dysfunction.



**Figure 5** A schema of the VSM

### The Business and its Environment

Beer's definition of a 'viable system' identifies an organisational entity existing within a shared environment. The notion of an environment is suggestive of all the space within which the organisation functions. It draws attention to the distinction between an inside and an outside and the nature of the relationship between the two. The observation of recurrent interactions between individuals denotes a 'structural coupling' of a social nature (Maturana and Varela, 1988). An observer of interactions within the organisation will discern the occurrence of

## **Business Strategy: thinking, discourse and action through a Cybernetics lens**

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a specific configuration of recurrent interactions, irrespective of whom the interactions are with outside the organisation. From a business-environment perspective, recurrent interactions can potentially take place between any of the individuals inside and any outside, though there will be some (e.g. marketing and purchasing personnel) whose interactions will be expected to be more recurrent than others (e.g. production operators). Indeed, the observer will also discern interactions of a one-to-many nature, this perhaps denoting the boundary between inside and outside. Whilst these interactions define a local external space, there will be influences from the more general environment. However, from the perspective of the lower levels of recursion (e.g. businesses), the higher levels of the meta-system become conflated with this general environment, exemplified by the political and economic policies of governments.

Espejo (1993) draws attention to the view that only a few individuals are concerned with what goes on outside, but makes the point that many messages are received which may have value but are not heard; the message is lost because the structure is not in place to handle it. Moreover, Espejo states that “everyone is responsible for the organization's balance with its medium” (Espejo, 1993: 520) and comments that ‘corporate observers’ are “oblivious to the capabilities of the rest of the organizational members” (ibid). The significance of this is that it draws attention to the importance of the organisational structure as a conduit for discourses relevant to strategising.

One of the challenges of any business is that what is outside is forever changing, with specific events possibly causing massive disruption which may be of a relatively temporary nature (9/11 or the 2010 Icelandic volcano) or of a relatively permanent nature (e.g. the financial repercussions from the sub-prime blow-out of 2007). Alternatively, the business, if innovative, is able to shape the niche it is coupled to (e.g. Apple). This raises the issue of the flexibility of a business to respond to or to shape change. Moreover, this notion of flexibility is compliant with the notion of stability in that the functioning and structural coupling of the business must be ongoing over time as exemplified by DuPont (founded in 1802) and now challenging Kodak (founded in 1880) as it shifts towards digital technologies and away from photographic film. Flexibility is the capability to adapt to change, whether self-generated or as a response to what is going on outside. This draws attention to the notion of leadership’ and the mechanism of adaptation.

### Leadership: Identity, Purpose, Policies, Values and Direction

The word ‘leadership’ denotes an attribute which can be ascribed to the manner in which an organisational entity develops over time. With leadership there is a shared sense of identity. There is also likely to be a shared sense of purpose, values and direction, as well as policies which reinforce these. Whilst there is no necessary or obvious causal link between each of these, ‘leadership is used here to denote these different issues. These establish what the organisational entity is, what it does, what principles governs what it does, where it intends to be in the future and how it is to be perceived. This invokes the notion of self-recognition as well as recognition by others. Self-recognition and the ability to shape itself, denote an autonomous organisational entity. An autonomous entity has the discretion about what it is and does (Espejo, 1999).

## **Business Strategy: thinking, discourse and action through a Cybernetics lens**

S.A. Harwood © June 2010

A core feature is the notion of identity. Identity is created through the configuration of relationships that establishes what the organisational entity is (i.e. how it sees itself) and what it is perceived to be by an observer (i.e. how it is recognised by others). An observer ascribes purpose by what the organisation is perceived to do, which may or not be the same as what the organisation views itself as doing. The organisation is likely to have a view (vision) as to where it wishes to be in the future. Likewise it may have a set of guiding general principles (values) which governs how it achieves this vision (e.g. workers' rights). These may manifest as a mission statement. There are also likely to be policies about specific issues (e.g. the giving of gifts and bribery in developing countries) and which guide practices. These are all issues which are pertinent to any discussions about strategy, which in the case of the company could be expected to take place, but not exclusively, amongst the senior management team. However the aforementioned is equally applicable to the autonomous production team with responsibility for their work-area.

### Adaptation

Espejo (1999) states:

The mechanism for adaptation is usually associated with strategic management and is constituted by the policy [system five], intelligence [system four] and cohesion functions [system three / three\*] (ibid: 673)

Adaptation is the ability to maintain alignment of internal activity with external demands. The emphasis is upon the dynamic of systems three and four, operating within the boundaries set by systems five. However, there are times when there is a need for adjustments in system five, in terms of identity, purpose, direction and policy.

System three is concerned with what is going on operationally on a day-to-day basis, monitoring performance in terms of daily targets, quality non-conformances, absenteeism, deviations from standard costs, late supplier deliveries, etc. System three places emphasis upon the organisation of the system-in-focus.

System four is concerned with what is going on outside, both within the niche it is structurally coupled with as well as beyond in terms of the more general environment. It is anticipatory in terms of possible futures. It attempts to understand the past to predict the future. System four can also be viewed as the instrument for generating self-awareness. It is interested in history and draws upon the 'organisational memory' (Stein, 1995) of the system-in-focus, in terms of what has happened, the learning from experience and the accumulated knowledge passed on from generation to generation, recorded and stored. However, there is the danger of 'corporate amnesia' (Kransdork, 1998) due to ineffective mechanisms for learning from experiences, the destruction of records and the departure of people.

This blend of reflection and looking outside and forward is essentially a modelling mechanism, which draws upon such analytical devices as PESTLE, Porter's Five Forces Model, scenarios, SWOT, CRM, work-load, cash-flow, profitability and ROI. This activity is typically that which is carried out in the planning department. However, as stated by Mintzberg (1994), there is a distinction between this analytical work and the thinking that is involved in the development of strategies, which is a more organisation wide activity. This draws attention to

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the manner in which these models are used. Harnden (1989) distinguishes between models being viewed as representations of reality and as devices to support discussions about the issues they raise. With the former view, there is the danger that the model becomes the reality irrespective of the phenomenon being modelled (e.g. inflexible performance targets which need to be met irrespective of the assumptions underpinning the original modelling). However, Harnden (1989) highlights that models and that which is modelled exist in separate domains. The ramification of this is that models only capture aspects of the real world, with that which is absent in the model perhaps having significance which is not appreciated when making decisions based on the model. Irrespective, this modelling mechanism generates, through the act of modelling, a self-awareness of capability.

System four, manifesting in organisational terms as the formalised planning function, provides an analytical service (Mintzberg, 1994) to the strategising that goes on within each of the recursive levels. However, the good intentions of the specialist modelling activity of system four need not be appreciated by the other parts of the organisation. One of the challenges facing system four is its interaction with the system four at other levels of recursion and the willingness to be listened to, revealing a centralisation – autonomy tension. Likewise is the relationship between a higher level system four and lower level system threes.

System three functions with system four as an adaptation mechanism, which aligns what is going on in system one with what is going on outside, both now and into the future. Since organisations tend to be relatively stable in terms the people and roles, any change will tend to focus on the development of roles, thereby improving capability, and improvement of channels of communication, thereby improving the exchange of information and enabling the requisite discussions on issues raised by individuals (Harwood, 2010). However, the adaptation mechanism will fail if systems three and four do not work together (i.e. operations have progressively less work and nothing appears to be done about it to utilise the growing excess capacity, perhaps by moving into new markets or finding new product opportunities). It is a learning mechanism, working with models and learning from experience. Failure will also occur if there is no implementation. Implementation is strategy-in-action, whether intended or emergent from an incremental sequence of decisions for which a pattern is observed.

### Dysfunction

This idealised portrayal of the viable systems acknowledges that organisations do not work like this. They are most likely to be dysfunctional in some manner, this manifesting in the symptoms that disrupt those affected.

For example, the late delivery of a fridge to a customer can appear as an incident. However, symptoms disguise a dysfunctional process. A priority delivery that is late raises more serious issues of process dysfunctionality in that the process is now one which has preferential attention. It raises questions about not only the logistics activity and adherence to procedure, but also planning, training and management. Moreover, it raises questions about the attitude to ‘prevention’ and continuous improvement. These are applicable to all aspects of the business process, so if attention is given to the mundane but non-conforming aspects of the delivery process then it could be expected that it would reduce the possibility of a priority delivery being late with the ramification that the delivery process offers a capability which is a strategic asset.

## **Business Strategy: thinking, discourse and action through a Cybernetics lens**

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However, this is merely one example of many forms of dysfunctionality which disrupt the smooth functioning of the business. The symptoms of dysfunctionality manifest in many forms of which the following are just a few examples:

- people: apathy; resistance; absenteeism; staff turnover; lack of innovation; inequitable influence.
- processes: long process lead-times; stoppages; queues; non-conformances (e.g. defects; errors) and high levels of work-in-progress; unavailable materials; lack of responsiveness to outside influences; unintended consequences of mutual interaction between separate processes.
- communication: poor engagement with potential customers; no exchange of knowledge.
- technology: inappropriate for practices; limited capability; lack of interoperability; provision of a centralised service provision (e.g. data storage) with connectivity down-time / inadequate channel capacity.
- management: interference in the management of lower levels.
- policy: mis-aligned with practice; implications not understood.

The value of the VSM is that it helps explain why symptoms appear; whether they are due to lack of clarity about purpose, direction or due to breakdown in the structural coherence of the organisation (Espejo, 2008). The VSM offers a device to examine why it is that there is, for example, high staff turnover, drawing attention to such issues as over-use of the edict channel, unfairness in the resource bargaining and lack of autonomy. A more comprehensive account of this is presented in Espejo (2008).

One dramatic symptom of dysfunctionality is the mobilisation of resources to deal with a crisis. Structures for discourse swiftly manifest when a crisis ‘suddenly’ occurs as in the case of an unexpected event (e.g. the 2010 Icelandic volcano). Executives are recalled from holiday, experts are flown in and there is a succession of workshops, meetings and consultations until a consensual decision is made about the way forward. What is it that makes this work that is not embedded within the day-to-day?

A significant challenge facing organisations is the cultural embeddedness that dysfunctionality is acceptable. However, it is not argued that there has to be change for the sake of it. The stimulus for change is to deal with dysfunctionality and improve.

### **Implications for the implementation of strategic decisions**

The preceding account has provided an insight into the VSM and how it can be used to conceptually model the structural dynamics of an organisation within the context of its meta-system. It has focused upon several issues which are pertinent to the process of strategising. However, strategising, whilst involving analysis and decision-making is also about implementation. This section considers the implications from insights gained from the VSM for the implementation of strategic decisions. Three themes are selected to illustrate issues that can be revealed; internationalisation, diversification and collectively, new ventures, collaborative ventures and M&A.



## **Business Strategy: thinking, discourse and action through a Cybernetics lens**

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### Implications for Internationalisation

In contrast to the domestic business arena, an organisation's internationalisation activities introduce new challenges, these being associated with the crossing of national boundaries and accessing the unfamiliar. Internationalisation activity can be customer or supply orientated. In both cases, there is a need to establish new relationships and new regulatory mechanisms, as well as become familiar with border controls, with the business environment and also the societal, cultural and legal arena. From a customer demand perspective it is necessary to access distribution networks and outlets, leading to perhaps contractual arrangements (e.g. franchising). From a supply perspective internationalising can take the form of sourcing of materials, labour and expertise, or the outsourcing or off-shoring of primary activities (e.g. assembly) or regulatory activities (e.g. research and development). In both demand and supply instances, internationalisation may involve collaborative ventures, acquisitions or mergers (discussed below).

Efforts to understand the internationalisation process have led to the conception of stage models to explain the learning process by which the internationalising firm establishes a foreign presence. These are typified by the export led model of Bilkey (1978) and the 'establishment chain' (Uppsala) model of Johanson & Vahlne (1977). However, whatever the manner of internationalisation, crossing a border elevates the risk that something can go wrong operationally. This challenges co-ordination and monitoring-control mechanisms, particularly over longer distances, across time zones, with different languages. This manifests most clearly within transnational corporations which have within their organisation, entities organised on a geographical basis. Whereas, internalised activities that are off-shored potentially retain the requisite regulatory mechanisms provided to the rest of the organisation, out-sourced activities lose this, with control being channelled through the resource bargaining and audit mechanisms manifesting in the supplier approval process, contractual agreement and the supplier audit. The situation becomes potentially more precarious with the use of agents to develop markets. Diaspora may offer a means to overcome the challenges through their proximity and familiarity with the target location, but assumes that they have the capability to facilitate the development of the right connections. It is clear that internationalisation is a process in which the ability to establish new structural relationships and new regulatory capability is an integral feature of success.

### Implications for Diversification

Diversification has attracted much debate over the last fifty years. Furthermore, the 1980s is marked by a shift away from extensive diversification of American companies characterising the previous period towards increasing focus upon core activities (Goold & Luchs, 1993), a trend followed soon after by European firms (Franko, 2004). The early assumption that general management skills could handle diversification was undermined by evidence of the poor performance of many diversified businesses (Goold & Luchs, 1993; Franco, 2004). Moreover, whilst the lowering and elimination of trade barriers has made it easier for firms to specialise, shareholders are uncompromising about underperforming diversified activities (Franko, 2004).

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This concern for performance has itself received much attention since the pioneering work of Rumelt in 1974. Rumelt (1974) had concluded that those firms that had diversified into related areas exhibited higher levels of profitability than those into unrelated areas or who were vertically integrated, a finding in part substantiated by Palich et al (2000) nearly thirty years later from their review of 55 published studies. A study by Grant et al (1988) indicated that diversification (both related and unrelated) was more profitable than a focused strategy. Moreover, they found little evidence of an association between broad diversification and performance.

However, these attempts to derive a causal relationship between diversification and performance ignore the dynamics of how diversification is implemented (Gary, 2005). Rumelt's explanation for his findings highlighted the ability to exploit common core skills or resources. This inferred notion of synergy has underpinned arguments supporting related diversification rather than unrelated diversification (e.g. Markides, 1995; Gary 2005). Franko (2004). highlights that companies that have been successful in both product and geographical diversification have required complex (matrix) organisational structures, though few of these structures persisted. Indeed, Grant et al's (1988) recommendations for the study of organisational structures and management systems, draws upon Dundas & Richardson's (1982) argument that diversification into unrelated activities can be a successful strategy. Dundas & Richardson (1982) identified the importance of structure (small HQ and autonomous units), audit and executive remuneration amongst the key features of successfully diversified businesses. Ramanujam & Varadarajan (1988), in their synthesis of research into diversification suggest that "management of diversity" is an important determinant of performance (ibid: 543). They highlighted the importance of the "levers of implementation... structure, systems and management style" (ibid: 543).

From this brief review, it is apparent that efforts to establish how diversification and performance are associated, which tends to take the form of scale quantitative studies, contrasts with the recognition that the contingent factor to explain any association is the nature of the organisational structure and the requisite regulatory mechanisms to handle the variety and potential synergies associated with diversification, which supports in-depth case-study approaches. Indeed, that some firms are viewed as successful in their broadly diversified activities (Dundas & Richardson, 1982) invites these more localised studies. Since synergy results from the manner of integration of the different part, this invites questions about the barriers to relations between the respective elements from which synergies might be achieved. Why should two autonomous entities serving separate niches interfere with each other in such a way to undermine their respective performance? Furthermore, why should the intervention of a meta-organisation in the autonomy of the respective entities undermine their respective behaviours? There is the issue of the incurrence and distribution of costs and whether synergies both alleviates these costs and impacts revenues. Moreover, has the business context in which diversification has been previously assessed significantly changed with the global financial crisis that emerged in 2008 making diversification more attractive as a means of distributing risk? The modelling of diversification using the VSM highlights the importance of both co-ordination and monitoring-control mechanisms as well as the strength of the relations between primary activities, though oversimplifies. Diversification offers a challenging strategy, about which it appears there are strong views (e.g. institutional shareholder views about diversification and

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performance), though there does not appear to be much in-depth understanding of the dynamics in which diversification affects performance.

### Implications for New Ventures, Collaborative Ventures, Mergers & Acquisitions

Whereas diversification relates to internalised activities and the manner of their integration, this section examines strategies that involve other entities, whether created or partnered. There is an extensive literature on this broad theme, though a cursory study of this literature reveals the regulatory underpinnings for each of these respective strategies. Moreover, the VSM can also provide insight into these.

For New Ventures, whether this is a start-up or spin-off joint venture, the emphasis is upon the creation of independent autonomous entities. Whereas the spin-off has an existing structural framework, its challenge is the formation of an effective functioning top management team. This can be interpreted in terms of the systems two to five of the top level of recursion of the VSM for the spin-off. In addition to the challenge of establishing its regulatory form, the start-up has the significant challenge of developing the requisite relations with its environment to be self-sustaining.

Collaborative Ventures (e.g. strategic alliances) tend to be contractual and thus of a 'loosely coupled' nature (i.e. the respective entities retain a separate identity (Lou, 2008)). Trust, together with commitment, complementarity and financial payoff are viewed as key ingredients for a successful relationship (Shah & Swaminathan, 2008). Nevertheless, any collaborative relationship needs to be managed, which places emphasis upon how resources are allocated, how activities are co-ordinated and how outcomes are monitored and handled. Dyer et al (2001) suggests a dedicated function which:

coordinates all alliance-related activity within the organization and is charged with institutionalizing processes and systems to teach, share and leverage prior alliance-management experience and know-how throughout the company (ibid: 37).

In the special case of joint ventures, the creation of a new entity does not imply that the new entity is wholly autonomous. The parental ownership of equity in the joint venture may have the associated expectation of being able to intervene in decisions. Indeed, Chen et al (2009) argues that parents still retain control to achieve objectives, identifying three types: output, process and social control. Output controls are liken to resource bargaining whereby there are rewards or penalties for achieving targets. Process controls are monitoring-control and co-ordinatory mechanisms (e.g. standard procedures, rules, reporting / approval processes). Social controls are transmitted through social interaction (e.g. rituals, team-work). Whatever the form of the collaborative venture, there is a configured regulatory aspect which needs to be appropriate to the situation.

Within M&A there is collapsing of two entities into one, which raises the challenge of integration. A CEO Roundtable discussion on M&A published in Harvard Business Review (Carey, 2000) provides an insight into the concerns of top executives. One executive recounted how cultural integration was not a necessity, since, whilst some acquisitions were completely integrated, others retained their autonomy. In the latter case, it is assumed that it is necessary to develop an interface that allows interoperability with the acquirer yet preserves

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the autonomy of the target and hence identity of the target. Mergers offer the challenge of how to align the respective structures of the merged entities to create a unified entity. Kanter (2009: 125) suggests the creation of a “business model that’s not identified with any one legacy company” as a means to improve collaboration. Irrespective of whether a merger or an acquisition, the VSM draws attention to the integrative aspects of this and the question of how the structural integrity of the changed organisational entities is preserved.

### **Discussion and conclusion**

This analysis has focused upon the process of strategising. Strategising is poorly understood. Indeed, no attempt has been made here to define this process. Instead, the VSM is presented as a conceptual framework to gain a better understanding of strategising in terms of actual practices, as well as a device to support discourse about the structural implications of strategising and possible strategies. The VSM allows for the modelling of both the context in which strategising takes place and the process of strategising, which should include as an essential feature, consideration of the implications of implementing possible strategies upon the organisation. Process and content are inter-twined, with each shaping the other. This duality of use supports the analysis of strategising as an integrally embedded feature of the functioning of the organisation.

The insight provided by the VSM is that it is not necessarily a process that is confined to centralised planning department but is a diffused process involved many parts of the business. This insinuates that strategising is not a linear process following a prescribed approach (e.g. understand situation, identify options, select option, implement and review). Such prescriptive positivistic approaches assumes that there are facts to be found about the world through systematic data collection and analysis by a planning department and that sound reasoning will underpin decisions by top management about the optimal course of action in the interests of the organisation. This linear view is questioned.

Instead, strategising is viewed as informed discourse from which decisions emerge about what appears to be the best course of action. It will involve data collection and analysis, but as part of the ongoing discourse among the respective stakeholders. Moreover, the requisite informed discourse will only arise if the organisational structure is in place to provide the requisite interactions through which discourse takes place; that all stakeholders have a channel through which they can participate in this discourse. A flawed structure prohibits discourse from those excluded. However, this assumes that there is a willingness to allow discourse from all stakeholders, particularly from those who might disagree with possible decisions. The VSM suggests how discourse might be attained, drawing attention to the relationships between the respective entities (e.g. market intelligence, technology expertise, operational processes, divisions, collaborating partners). However, it does not provide guidance about how to handle the tensions of dissent.

In many respects the VSM provides a further contribution to the debate initiated by Chandler (1962), but countered by Hall & Sais (1980) about the relationship between strategy and structure: which determines which? It is postulated that a structure will remain unchanged if it is conducive to the effective implementation of a strategy, otherwise it will be changed. But this makes an assumption, which is symptomatic of the period in

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which these writings were presented, about the nature of strategy, that it is ‘some-thing’, rather than a complex comprising of thought, discourse and action within a specific context.

One implication of presenting the VSM as a device to support both the understanding of strategising and a device to support strategising is that it creates the challenge of how to diffuse to those who could make use of the VSM (e.g. practitioners and researchers). It is not model which is easily explained and thus creates a knowledge transfer challenge which offers an avenue for future research.

Nevertheless, in terms of future research, this paper provides a conceptual framework to ground detailed studies of strategising as practiced within organisations, whether these are large or small organisations. One issue which the VSM does not address appeared in the overview of diversification as a strategy. This raised the question of whether diversification undermined the performance of a business distinguishing between related and unrelated diversification. Insights from the VSM suggest that this is a complex issue and that, on the surface, firms are not good at this. It is suggested that this offers a potential theme for further investigation, since it is questioned why unrelated diversification should be so problematic. From the perspective of the conceptual insights offered by the VSM, there does not appear to a theoretical reason why performance should be marred. Aside from the argument that some markets offer better returns than others, there is no apparent reason why two unrelated primary activities not perform efficient within their respective markets. This invites questions about the arguments supporting the enforced demerger of Cadbury’s and Schweppes on the grounds of performance.

To conclude, the VSM is presented as a powerful conceptual device, which, it is argued, provides both insights into the process of strategising as well as supports discourse within this process of strategising.

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## **Acronyms**

ATP	Area Tourism Partnership
CRM	Customer Relationship Management
ICT	Information & Communication Technology
IT	Information Technology
NGO	Non-government organisation
PESTLE	Politics, Economics, Socio-culture, Technology, Legal, Ecology.
PSM	Problem Structuring Methods
ROI	Return on Investment
SME	Small Medium -sized Enterprise
SWOT	Strength, Weakness, Opportunities, Threats
VSM	Viable System Model

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